UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/689,429	10/12/2000	William W. Lee	THEOR 201..1US	7077

24972 7590 02/03/2004	EXAMINER
FULBRIGHT & JAWORSKI, LLP	KIANERSI, MITRA

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ART UNIT	PAPER NUMBER
2143	5

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 October 2000*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 October 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

Claims 1-14 have been examined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 5-9, 12-14 are rejected under 35 U.S.C. 102(e) as being

anticipated by Apte et al. (US Patent No. 6,269,373)

1.   As per claim 1, Apte et al. teach a method of extending EJB Handles for
use with Enterprise JavaBeans (EJBs) to provide a Smart Handle, comprising the
steps of: maintaining an Entity EJB object relationship through a combination of
a proxy pattern, an EJB Handle, and a primary key of the EJB Handle;
(corresponds to creation of entity bean, col 16, lines 40-52), storing EJB Home
class from which an Entity EJB was generated and from which said Entity EJB
can be re-instantiated (col 16, lines 53-56); and maintaining an instance of a
Smart Key that describes said primary key for a database column to which an
Entity EJB object is mapped. (corresponds to when the entity bean data is
automatically maintained, col 16, lines 57-65, and col 17, lines 21-28)

2.   As per claim 2, Apte et al. teach a method further comprising the steps of instantiating said Entity EJB object associated with said Smart Handle with a single method invocation. (corresponds to stateful session bean, col 16, lines 10-17)

3.   As per claim 5, wherein said SmartKey includes said primary key of the EJB Handle, thereby providing portability to said Entity EJB object. (corresponds to portable, downloadable object implementations, and Java interface definitions, among others. col 8, lines 58-67)

4.   As per claim 6, further comprising the step of assigning each attribute of said Entity EJB object and said SmartKey to a separate column within a relational database table, thereby permitting said Smart Handle to be mapped to a multi-column relational database table. (corresponds to a container implemented on top of an RDBMS may manage persistence by storing each bean's data as a row in a table. Col 16, lines 57-61, Apte et al.)

5.   As per claim 7, wherein said Smart Handle includes at least attributes HomeClassName, KeyClassName, and HomeName. (corresponds to software entities comprising data elements or attributes and methods, which manipulate data elements. Col 6, lines 5-9)

6.   As per claim 8, a SmartHandle for extending EJB Handles for use with Enterprise JavaBeans (EJBs), comprising:

        -EJB Home class from which an Entity EJB was generated and from which said Entity (EJB) can be re-instantiated; and (corresponds to creation of entity bean, col 16, lines 40-52),

        -an instance of a SmartKey that describes said primary key for a database column to which an Entity EJB object is mapped; (col 16, lines 53-56);

        -wherein said Smart Handle maintains an Entity EJB object relationship

through a combination of a proxy pattern, an EJB Handle, and a primary key of
the EJB Handle; (corresponds to when the entity bean data is automatically
maintained, col 16, lines 57-65, and col 17, lines 21-28)

7.   Claims 9 and 12-14 recite the same limitations as claims 2 and 5-7.
Therefore, they are analyzed and rejected by the same rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for
all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

Claims 3-4 and 10-11 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Apte et al. (US Patent No. 6,269,373) and further in view of
Acker et al. (US 2002/0147696).

8.   As per claim 3, Apte et al. teach a method wherein said single method
invocation includes the steps of using reflection to obtain an jbFindByPrimaryKey
method; and invoking said ejbFindByPrimaryKey method with said SmartKey.
(corresponds to EJB being invoked by clients, col 7, lines 31-38) and also see
(col 6, lines 58-67)
Apte do not explicitly teach locating a EJB Home class using Java Naming and
Directory Interface (JNDI); Apte et al. teach an EJB Handle is a Java interface
defined in the EJB standard specification where a serialized EJB Handle object
contains references to the Handle implementation class. (col 2, lines 17-26).
However, Acker et al. teach a Java Naming and Directory Interface (JNDI) that

provide directory and naming functionality for Java applications, paragraph [0006]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate Apte's idea of EJB Handle as a Java interface with Acker et al. Java naming and Directory Interface (JNDI) for improving object interaction and name service behavior in an object-oriented environment.

9.   As per claim 4, further comprising the steps of:

-implementing java.util.Comparable interface; (corresponds to a route of Unit Test on local machines, Functional Test and Integration Test on departmental machines, and Production Test on globally available machines, each set of machines using a different name service scope, it is desirable to allow rebinding of the EJBs in an appropriate scope of the namespace without having to change the EJB deployment data and redeploying. Paragraph [0045], Acker) and

-delegating to a SmartKey class that implements a Java code to perform a field-by-field comparison of attributes associated with said primary key, thereby permitting two EJB Handles to be compared without instantiating the corresponding Entity EJB Objects. (a delegation model could just as easily be used, or the scoped initial context factory could completely implement the javax.naming.spi.InitialContextFactory interface. Paragraph [0038], Acker)

10.   Claims 10-11 recite the same limitations as claims 3-4. Therefore, they are analyzed and rejected by the same rationale.
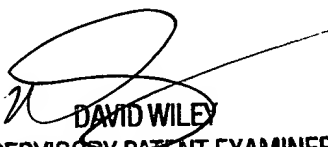
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitra Kianersi whose telephone number is (703) 305-4650. The examiner can normally be reached on 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the
examiner's supervisor, David Wiley can be reached on (703) 308-5221. The fax
phone number for the organization where this application or proceeding is
assigned is (703) 746-9923.

Any inquiry of a general nature or relating to the status of this application
or proceeding should be directed to the receptionist whose telephone number is
(703) 305-3900.

Mitra Kianersi
Jan/28/2004

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100